

1 **R307. Environmental Quality, Air Quality.**

2 **R307-101. General Requirements.**

3 **R307-101-2. Definitions.**

4 Except where specified in individual rules, definitions in  
5 R307-101-2 are applicable to all rules adopted by the Air Quality  
6 Board.

7 "Actual Emissions" means the actual rate of emissions of a  
8 pollutant from an emissions unit determined as follows:

9 (1) In general, actual emissions as of a particular date shall  
10 equal the average rate, in tons per year, at which the unit actually  
11 emitted the pollutant during a two-year period which precedes the  
12 particular date and which is representative of normal source  
13 operations. The director shall allow the use of a different time  
14 period upon a determination that it is more representative of normal  
15 source operation. Actual emissions shall be calculated using the  
16 unit's actual operating hours, production rates, and types of  
17 materials processed, stored, or combusted during the selected time  
18 period.

19 (2) The director may presume that source-specific allowable  
20 emissions for the unit are equivalent to the actual emissions of  
21 the unit.

22 (3) For any emission unit, other than an electric utility  
23 steam generating unit specified in (4), which has not begun normal  
24 operations on the particular date, actual emissions shall equal the  
25 potential to emit of the unit on that date.

26 (4) For an electric utility steam generating unit (other than  
27 a new unit or the replacement of an existing unit) actual emissions  
28 of the unit following the physical or operational change shall equal  
29 the representative actual annual emissions of the unit, provided  
30 the source owner or operator maintains and submits to the director,  
31 on an annual basis for a period of 5 years from the date the unit  
32 resumes regular operation, information demonstrating that the  
33 physical or operational change did not result in an emissions  
34 increase. A longer period, not to exceed 10 years, may be required  
35 by the director if the director determines such a period to be more  
36 representative of normal source post-change operations.

37 "Acute Hazardous Air Pollutant" means any noncarcinogenic  
38 hazardous air pollutant for which a threshold limit value - ceiling  
39 (TLV-C) has been adopted by the American Conference of Governmental  
40 Industrial Hygienists (ACGIH) in its "Threshold Limit Values for  
41 Chemical Substances and Physical Agents and Biological Exposure  
42 Indices, (2009)."

43 "Air pollutant" means a substance that qualifies as an air  
44 pollutant as defined in 42 U.S.C. Sec. 7602.

45 "Air Pollutant Source" means private and public sources of

1 emissions of air pollutants.

2 "Air Pollution" means the presence of an air pollutant in the  
3 ambient air in such quantities and duration and under conditions  
4 and circumstances, that are injurious to human health or welfare,  
5 animal or plant life, or property, or would unreasonably interfere  
6 with the enjoyment of life or use of property as determined by the  
7 standards, rules and regulations adopted by the Air Quality Board  
8 (Section 19-2-104).

9 "Allowable Emissions" means the emission rate of a source  
10 calculated using the maximum rated capacity of the source (unless  
11 the source is subject to enforceable limits which restrict the  
12 operating rate, or hours of operation, or both) and the emission  
13 limitation established pursuant to R307-401-8.

14 "Ambient Air" means that portion of the atmosphere, external  
15 to buildings, to which the general public has access. (Section 19-  
16 2-102(4)).

17 "Appropriate Authority" means the governing body of any city,  
18 town or county.

19 "Atmosphere" means the air that envelops or surrounds the earth  
20 and includes all space outside of buildings, stacks or exterior  
21 ducts.

22 "Authorized Local Authority" means a city, county, city-county  
23 or district health department; a city, county or combination fire  
24 department; or other local agency duly designated by appropriate  
25 authority, with approval of the state Department of Health; and  
26 other lawfully adopted ordinances, codes or regulations not in  
27 conflict therewith.

28 "Board" means Air Quality Board. See Section 19-2-102(8)(a).

29 "Breakdown" means any malfunction or procedural error, to  
30 include but not limited to any malfunction or procedural error  
31 during start-up and shutdown, which will result in the inoperability  
32 or sudden loss of performance of the control equipment or process  
33 equipment causing emissions in excess of those allowed by approval  
34 order or Title R307.

35 "BTU" means British Thermal Unit, the quantity of heat  
36 necessary to raise the temperature of one pound of water one degree  
37 Fahrenheit.

38 "Calibration Drift" means the change in the instrument meter  
39 readout over a stated period of time of normal continuous operation  
40 when the VOC concentration at the time of measurement is the same  
41 known upscale value.

42 "Carbon Adsorption System" means a device containing adsorbent  
43 material (e.g., activated carbon, aluminum, silica gel), an inlet  
44 and outlet for exhaust gases, and a system for the proper disposal  
45 or reuse of all VOC adsorbed.

1 "Carcinogenic Hazardous Air Pollutant" means any hazardous air  
2 pollutant that is classified as a known human carcinogen (A1) or  
3 suspected human carcinogen (A2) by the American Conference of  
4 Governmental Industrial Hygienists (ACGIH) in its "Threshold Limit  
5 Values for Chemical Substances and Physical Agents and Biological  
6 Exposure Indices, (2009)."

7 "Chargeable Pollutant" means any regulated air pollutant except  
8 the following:

9 (1) Carbon monoxide;

10 (2) Any pollutant that is a regulated air pollutant solely  
11 because it is a Class I or II substance subject to a standard  
12 promulgated or established by Title VI of the Act, Stratospheric  
13 Ozone Protection;

14 (3) Any pollutant that is a regulated air pollutant solely  
15 because it is subject to a standard or regulation under Section  
16 112(r) of the Act, Prevention of Accidental Releases.

17 "Chronic Hazardous Air Pollutant" means any noncarcinogenic  
18 hazardous air pollutant for which a threshold limit value - time  
19 weighted average (TLV-TWA) having no threshold limit value - ceiling  
20 (TLV-C) has been adopted by the American Conference of Governmental  
21 Industrial Hygienists (ACGIH) in its "Threshold Limit Values for  
22 Chemical Substances and Physical Agents and Biological Exposure  
23 Indices, (2009)."

24 "Clean Air Act" means federal Clean Air Act as found in 42  
25 U.S.C. Chapter 85.

26 "Clean Coal Technology" means any technology, including  
27 technologies applied at the precombustion, combustion, or post  
28 combustion stage, at a new or existing facility which will achieve  
29 significant reductions in air emissions of sulfur dioxide or oxides  
30 of nitrogen associated with the utilization of coal in the  
31 generation of electricity, or process steam which was not in  
32 widespread use as of November 15, 1990.

33 "Clean Coal Technology Demonstration Project" means a project  
34 using funds appropriated under the heading "Department of Energy-  
35 Clean Coal Technology," up to a total amount of \$2,500,000,000 for  
36 commercial demonstration of clean coal technology, or similar  
37 projects funded through appropriations for the Environmental  
38 Protection Agency. The Federal contribution for a qualifying  
39 project shall be at least 20 percent of the total cost of the  
40 demonstration project.

41 "Clearing Index" means an indicator of the predicted rate of  
42 clearance of ground level pollutants from a given area. This number  
43 is provided by the National Weather Service.

44 "Coating" means a material that can be applied to a substrate  
45 and which cures to form a continuous solid film for protective,

1 decorative, or functional purposes. Such materials include, but are  
2 not limited to, paints, varnishes, sealants, adhesives, caulks,  
3 maskants, inks, and temporary protective coatings.

4 "Commence" as applied to construction of a major source or  
5 major modification means that the owner or operator has all  
6 necessary pre-construction approvals or permits and either has:

7 (1) Begun, or caused to begin, a continuous program of actual  
8 on-site construction of the source, to be completed within a  
9 reasonable time; or

10 (2) Entered into binding agreements or contractual  
11 obligations, which cannot be canceled or modified without  
12 substantial loss to the owner or operator, to undertake a program  
13 of actual construction of the source to be completed within a  
14 reasonable time.

15 "Composite vapor pressure" means the sum of the partial  
16 pressures of the compounds defined as VOCs.

17 "Condensable PM<sub>2.5</sub>" means material that is vapor phase at stack  
18 conditions, but which condenses and/or reacts upon cooling and  
19 dilution in the ambient air to form solid or liquid particulate  
20 matter immediately after discharge from the stack.

21 "Compliance Schedule" means a schedule of events, by date,  
22 which will result in compliance with these regulations.

23 "Construction" means any physical change or change in the  
24 method of operation including fabrication, erection, installation,  
25 demolition, or modification of a source which would result in a  
26 change in actual emissions.

27 "Control Apparatus" means any device which prevents or controls  
28 the emission of any air pollutant directly or indirectly into the  
29 outdoor atmosphere.

30 "Department" means Utah State Department of Environmental  
31 Quality. See Section 19-1-103(1).

32 "Director" means the Director of the Division of Air Quality.  
33 See Section 19-1-103(1).

34 "Division" means the Division of Air Quality.

35 "Electric Utility Steam Generating Unit" means any steam  
36 electric generating unit that is constructed for the purpose of  
37 supplying more than one-third of its potential electric output  
38 capacity and more than 25 MW electrical output to any utility power  
39 distribution system for sale. Any steam supplied to a steam-  
40 distribution system for the purpose of providing steam to a steam-  
41 electric generator that would produce electrical energy for sale is  
42 also considered in determining the electrical energy output capacity  
43 of the affected facility.

44 "Emission" means the act of discharge into the atmosphere of  
45 an air pollutant or an effluent which contains or may contain an

1 air pollutant; or the effluent so discharged into the atmosphere.

2 "Emissions Information" means, with reference to any source  
3 operation, equipment or control apparatus:

4 (1) Information necessary to determine the identity, amount,  
5 frequency, concentration, or other characteristics related to air  
6 quality of any air pollutant which has been emitted by the source  
7 operation, equipment, or control apparatus;

8 (2) Information necessary to determine the identity, amount,  
9 frequency, concentration, or other characteristics (to the extent  
10 related to air quality) of any air pollutant which, under an  
11 applicable standard or limitation, the source operation was  
12 authorized to emit (including, to the extent necessary for such  
13 purposes, a description of the manner or rate of operation of the  
14 source operation), or any combination of the foregoing; and

15 (3) A general description of the location and/or nature of  
16 the source operation to the extent necessary to identify the source  
17 operation and to distinguish it from other source operations  
18 (including, to the extent necessary for such purposes, a description  
19 of the device, installation, or operation constituting the source  
20 operation).

21 "Emission Limitation" means a requirement established by the  
22 Board, the director or the Administrator, EPA, which limits the  
23 quantity, rate or concentration of emission of air pollutants on a  
24 continuous emission reduction including any requirement relating to  
25 the operation or maintenance of a source to assure continuous  
26 emission reduction (Section 302(k)).

27 "Emissions Unit" means any part of a stationary source which  
28 emits or would have the potential to emit any pollutant subject to  
29 regulation under the Clean Air Act.

30 "Enforceable" means all limitations and conditions which are  
31 enforceable by the Administrator, including those requirements  
32 developed pursuant to 40 CFR Parts 60 and 61, requirements within  
33 the State Implementation Plan and R307, any permit requirements  
34 established pursuant to 40 CFR 52.21 or R307-401.

35 "EPA" means Environmental Protection Agency.

36 "EPA Method 9" means 40 CFR Part 60, Appendix A, Method 9,  
37 "Visual Determination of Opacity of Emissions from Stationary  
38 Sources," and Alternate 1, "Determination of the opacity of  
39 emissions from stationary sources remotely by LIDAR."

40 "Executive Director" means the Executive Director of the Utah  
41 Department of Environmental Quality. See Section 19-1-103(2).

42 "Existing Installation" means an installation, construction of  
43 which began prior to the effective date of any regulation having  
44 application to it.

45 "Filterable PM2.5" means particles with an aerodynamic diameter

1 equal to or less than 2.5 micrometers that are directly emitted by  
2 a source as a solid or liquid at stack or release conditions and  
3 can be captured on the filter of a stack test train.

4 "Fireplace" means all devices both masonry or factory built  
5 units (free standing fireplaces) with a hearth, fire chamber or  
6 similarly prepared device connected to a chimney which provides the  
7 operator with little control of combustion air, leaving its fire  
8 chamber fully or at least partially open to the room. Fireplaces  
9 include those devices with circulating systems, heat exchangers, or  
10 draft reducing doors with a net thermal efficiency of no greater  
11 than twenty percent and are used for aesthetic purposes.

12 "Fugitive Dust" means particulate, composed of soil and/or  
13 industrial particulates such as ash, coal, minerals, etc., which  
14 becomes airborne because of wind or mechanical disturbance of  
15 surfaces. Natural sources of dust and fugitive emissions are not  
16 fugitive dust within the meaning of this definition.

17 "Fugitive Emissions" means emissions from an installation or  
18 facility which are neither passed through an air cleaning device  
19 nor vented through a stack or could not reasonably pass through a  
20 stack, chimney, vent, or other functionally equivalent opening.

21 "Garbage" means all putrescible animal and vegetable matter  
22 resulting from the handling, preparation, cooking and consumption  
23 of food, including wastes attendant thereto.

24 "Gasoline" means any petroleum distillate, used as a fuel for  
25 internal combustion engines, having a Reid vapor pressure of 4  
26 pounds or greater.

27 "Hazardous Air Pollutant (HAP)" means any pollutant listed by  
28 the EPA as a hazardous air pollutant in conformance with Section  
29 112(b) of the Clean Air Act. A list of these pollutants is available  
30 at the Division of Air Quality.

31 "Household Waste" means any solid or liquid material normally  
32 generated by the family in a residence in the course of ordinary  
33 day-to-day living, including but not limited to garbage, paper  
34 products, rags, leaves and garden trash.

35 "Incinerator" means a combustion apparatus designed for high  
36 temperature operation in which solid, semisolid, liquid, or gaseous  
37 combustible wastes are ignited and burned efficiently and from which  
38 the solid and gaseous residues contain little or no combustible  
39 material.

40 "Installation" means a discrete process with identifiable  
41 emissions which may be part of a larger industrial plant. Pollution  
42 equipment shall not be considered a separate installation or  
43 installations.

44 "LPG" means liquified petroleum gas such as propane or butane.

45 "Maintenance Area" means an area that is subject to the

1 provisions of a maintenance plan that is included in the Utah state  
2 implementation plan, and that has been redesignated by EPA from  
3 nonattainment to attainment of any National Ambient Air Quality  
4 Standard.

5 (a) The following areas are considered maintenance areas for  
6 ozone:

7 (i) Salt Lake County, effective August 18, 1997; and

8 (ii) Davis County, effective August 18, 1997.

9 (b) The following areas are considered maintenance areas for  
10 carbon monoxide:

11 (i) Salt Lake City, effective March 22, 1999;

12 (ii) Ogden City, effective May 8, 2001; and

13 (iii) Provo City, effective January 3, 2006.

14 (c) The following areas are considered maintenance areas for  
15 PM<sub>10</sub>:

16 (i) Salt Lake County, effective on the date that EPA approves  
17 the maintenance plan that was adopted by the Board on December 2,  
18 2015; and

19 (ii) Utah County, effective on the date that EPA approves the  
20 maintenance plan that was adopted by the Board on December 2, 2015;  
21 and

22 (iii) Ogden City, effective on the date that EPA approves the  
23 maintenance plan that was adopted by the Board on December 2, 2015.

24 (d) The following area is considered a maintenance area for  
25 sulfur dioxide: all of Salt Lake County and the eastern portion of  
26 Tooele County above 5600 feet, effective on the date that EPA  
27 approves the maintenance plan that was adopted by the Board on  
28 January 5, 2005.

29 (e) The following areas are considered maintenance areas for  
30 PM<sub>2.5</sub>:

31 (i) the Salt Lake City, Utah 24-hr PM<sub>2.5</sub> nonattainment area,  
32 as defined in the July 1, 2019 version of 40 CFR 81.345, effective  
33 on the date that EPA redesignates the area to attainment for PM<sub>2.5</sub>;

34 (ii) the Provo, Utah 24-hr PM<sub>2.5</sub> nonattainment area, as  
35 defined in the July 1, 2019 version of 40 CFR 81.345, effective  
36 on the date that EPA redesignates the area to attainment for PM<sub>2.5</sub>;  
37 and

38 (iii) the Utah portion of the Logan, Utah-Idaho 24-hr PM<sub>2.5</sub>  
39 nonattainment area, as defined in the July 1, 2019 version of 40  
40 CFR 81.345, effective on the date that EPA redesignates the area  
41 to attainment for PM<sub>2.5</sub>.

42 "Major Modification" means any physical change in or change in  
43 the method of operation of a major source that would result in a  
44 significant net emissions increase of any pollutant. A net  
45 emissions increase that is significant for volatile organic

1 compounds shall be considered significant for ozone. Within Salt  
2 Lake and Davis Counties or any nonattainment area for ozone, a net  
3 emissions increase that is significant for nitrogen oxides shall be  
4 considered significant for ozone. Within areas of nonattainment  
5 for PM10, a significant net emission increase for any PM10 precursor  
6 is also a significant net emission increase for PM10. A physical  
7 change or change in the method of operation shall not include:

8 (1) routine maintenance, repair and replacement;

9 (2) use of an alternative fuel or raw material by reason of  
10 an order under section 2(a) and (b) of the Energy Supply and  
11 Environmental Coordination Act of 1974, or by reason of a natural  
12 gas curtailment plan pursuant to the Federal Power Act;

13 (3) use of an alternative fuel by reason of an order or rule  
14 under section 125 of the federal Clean Air Act;

15 (4) use of an alternative fuel at a steam generating unit to  
16 the extent that the fuel is generated from municipal solid waste;

17 (5) use of an alternative fuel or raw material by a source:

18 (a) which the source was capable of accommodating before  
19 January 6, 1975, unless such change would be prohibited under any  
20 enforceable permit condition; or

21 (b) which the source is otherwise approved to use;

22 (6) an increase in the hours of operation or in the production  
23 rate unless such change would be prohibited under any enforceable  
24 permit condition;

25 (7) any change in ownership at a source

26 (8) the addition, replacement or use of a pollution control  
27 project at an existing electric utility steam generating unit,  
28 unless the director determines that such addition, replacement, or  
29 use renders the unit less environmentally beneficial, or except:

30 (a) when the director has reason to believe that the pollution  
31 control project would result in a significant net increase in  
32 representative actual annual emissions of any criteria pollutant  
33 over levels used for that source in the most recent air quality  
34 impact analysis in the area conducted for the purpose of Title I of  
35 the Clean Air Act, if any, and

36 (b) the director determines that the increase will cause or  
37 contribute to a violation of any national ambient air quality  
38 standard or PSD increment, or visibility limitation.

39 (9) the installation, operation, cessation, or removal of a  
40 temporary clean coal technology demonstration project, provided that  
41 the project complies with:

42 (a) the Utah State Implementation Plan; and

43 (b) other requirements necessary to attain and maintain the  
44 national ambient air quality standards during the project and after  
45 it is terminated.



1 "Major Source" means, to the extent provided by the federal  
2 Clean Air Act as applicable to R307:

3 (1) any stationary source of air pollutants which emits, or  
4 has the potential to emit, one hundred tons per year or more of any  
5 pollutant subject to regulation under the Clean Air Act; or

6 (a) any source located in a nonattainment area for carbon  
7 monoxide which emits, or has the potential to emit, carbon monoxide  
8 in the amounts outlined in Section 187 of the federal Clean Air Act  
9 with respect to the severity of the nonattainment area as outlined  
10 in Section 187 of the federal Clean Air Act; or

11 (b) any source located in Salt Lake or Davis Counties or in  
12 a nonattainment area for ozone which emits, or has the potential to  
13 emit, VOC or nitrogen oxides in the amounts outlined in Section 182  
14 of the federal Clean Air Act with respect to the severity of the  
15 nonattainment area as outlined in Section 182 of the federal Clean  
16 Air Act; or

17 (c) any source located in a nonattainment area for PM10 which  
18 emits, or has the potential to emit, PM10 or any PM10 precursor in  
19 the amounts outlined in Section 189 of the federal Clean Air Act  
20 with respect to the severity of the nonattainment area as outlined  
21 in Section 189 of the federal Clean Air Act.

22 (2) any physical change that would occur at a source not  
23 qualifying under subpart 1 as a major source, if the change would  
24 constitute a major source by itself;

25 (3) the fugitive emissions and fugitive dust of a stationary  
26 source shall not be included in determining for any of the purposes  
27 of these R307 rules whether it is a major stationary source, unless  
28 the source belongs to one of the following categories of stationary  
29 sources:

30 (a) Coal cleaning plants (with thermal dryers);

31 (b) Kraft pulp mills;

32 (c) Portland cement plants;

33 (d) Primary zinc smelters;

34 (e) Iron and steel mills;

35 (f) Primary aluminum or reduction plants;

36 (g) Primary copper smelters;

37 (h) Municipal incinerators capable of charging more than 250  
38 tons of refuse per day;

39 (i) Hydrofluoric, sulfuric, or nitric acid plants;

40 (j) Petroleum refineries;

41 (k) Lime plants;

42 (l) Phosphate rock processing plants;

43 (m) Coke oven batteries;

44 (n) Sulfur recovery plants;

45 (o) Carbon black plants (furnace process);

1 (p) Primary lead smelters;  
2 (q) Fuel conversion plants;  
3 (r) Sintering plants;  
4 (s) Secondary metal production plants;  
5 (t) Chemical process plants;  
6 (u) Fossil-fuel boilers (or combination thereof) totaling more  
7 than 250 million British Thermal Units per hour heat input;  
8 (v) Petroleum storage and transfer units with a total storage  
9 capacity exceeding 300,000 barrels;  
10 (w) Taconite ore processing plants;  
11 (x) Glass fiber processing plants;  
12 (y) Charcoal production plants;  
13 (z) Fossil fuel-fired steam electric plants of more than 250  
14 million British Thermal Units per hour heat input;  
15 (aa) Any other stationary source category which, as of August  
16 7, 1980, is being regulated under section 111 or 112 of the federal  
17 Clean Air Act.  
18 "Modification" means any planned change in a source which  
19 results in a potential increase of emission.  
20 "National Ambient Air Quality Standards (NAAQS)" means the  
21 allowable concentrations of air pollutants in the ambient air  
22 specified by the Federal Government (Title 40, Code of Federal  
23 Regulations, Part 50).  
24 "Net Emissions Increase" means the amount by which the sum of  
25 the following exceeds zero:  
26 (1) any increase in actual emissions from a particular  
27 physical change or change in method of operation at a source; and  
28 (2) any other increases and decreases in actual emissions at  
29 the source that are contemporaneous with the particular change and  
30 are otherwise creditable. For purposes of determining a "net  
31 emissions increase":  
32 (a) An increase or decrease in actual emissions is  
33 contemporaneous with the increase from the particular change only  
34 if it occurs between the date five years before construction on the  
35 particular change commences; and the date that the increase from  
36 the particular change occurs.  
37 (b) An increase or decrease in actual emissions is creditable  
38 only if it has not been relied on in issuing a prior approval for  
39 the source which approval is in effect when the increase in actual  
40 emissions for the particular change occurs.  
41 (c) An increase or decrease in actual emission of sulfur  
42 dioxide, nitrogen oxides or particulate matter which occurs before  
43 an applicable minor source baseline date is creditable only if it  
44 is required to be considered in calculating the amount of maximum  
45 allowable increases remaining available. With respect to

1 particulate matter, only PM10 emissions will be used to evaluate  
2 this increase or decrease.

3 (d) An increase in actual emissions is creditable only to the  
4 extent that the new level of actual emissions exceeds the old level.

5 (e) A decrease in actual emissions is creditable only to the  
6 extent that:

7 (i) The old level of actual emissions or the old level of  
8 allowable emissions, whichever is lower, exceeds the new level of  
9 actual emissions;

10 (ii) It is enforceable at and after the time that actual  
11 construction on the particular change begins; and

12 (iii) It has approximately the same qualitative significance  
13 for public health and welfare as that attributed to the increase  
14 from the particular change.

15 (iv) It has not been relied on in issuing any permit under  
16 R307-401 nor has it been relied on in demonstrating attainment or  
17 reasonable further progress.

18 (f) An increase that results from a physical change at a  
19 source occurs when the emissions unit on which construction occurred  
20 becomes operational and begins to emit a particular pollutant. Any  
21 replacement unit that requires shakedown becomes operational only  
22 after a reasonable shakedown period, not to exceed 180 days.

23 "New Installation" means an installation, construction of which  
24 began after the effective date of any regulation having application  
25 to it.

26 "Nonattainment Area" means an area designated by the  
27 Environmental Protection Agency as nonattainment under Section 107,  
28 Clean Air Act for any National Ambient Air Quality Standard. The  
29 designations for Utah are listed in 40 CFR 81.345.

30 "Offset" means an amount of emission reduction, by a source,  
31 greater than the emission limitation imposed on such source by these  
32 regulations and/or the State Implementation Plan.

33 "Opacity" means the capacity to obstruct the transmission of  
34 light, expressed as percent.

35 "Open Burning" means any burning of combustible materials  
36 resulting in emission of products of combustion into ambient air  
37 without passage through a chimney or stack.

38 "Owner or Operator" means any person who owns, leases,  
39 controls, operates or supervises a facility, an emission source, or  
40 air pollution control equipment.

41 "PSD" Area means an area designated as attainment or  
42 unclassifiable under section 107(d)(1)(D) or (E) of the federal  
43 Clean Air Act.

44 "PM2.5" means particulate matter with an aerodynamic diameter  
45 less than or equal to a nominal 2.5 micrometers as measured by an

1 EPA reference or equivalent method.

2 "PM2.5 Precursor" means any chemical compound or substance  
3 which, after it has been emitted into the atmosphere, undergoes  
4 chemical or physical changes that convert it into particulate  
5 matter, specifically PM2.5.

6 (1) Specifically, Sulfur dioxide, Nitrogen oxides, Volatile  
7 organic compounds and Ammonia are precursors to PM2.5 in any PM2.5  
8 nonattainment area, except where the Administrator of the EPA has  
9 approved a demonstration satisfying 40 CFR 51.1006(a)(3) which has,  
10 for a particular PM2.5 nonattainment area, determined otherwise.

11 (2) The following subparagraphs denote specific nonattainment  
12 areas (as defined in the July 1, 2017 version of 40 CFR 81.345),  
13 within which certain pollutants identified in paragraph (1) are  
14 exempted from the definition of PM2.5 precursor for the purposes of  
15 40 CFR 51.165

16 (a) In the Logan UT-ID PM2.5 nonattainment area - Ammonia is  
17 exempted.

18 "PM10" means particulate matter with an aerodynamic diameter  
19 less than or equal to a nominal 10 micrometers as measured by an  
20 EPA reference or equivalent method.

21 "PM10 Precursor" means any chemical compound or substance  
22 which, after it has been emitted into the atmosphere, undergoes  
23 chemical or physical changes that convert it into particulate  
24 matter, specifically PM10.

25 "Part 70 Source" means any source subject to the permitting  
26 requirements of R307-415.

27 "Person" means an individual, trust, firm, estate, company,  
28 corporation, partnership, association, state, state or federal  
29 agency or entity, municipality, commission, or political subdivision  
30 of a state. (Subsection 19-2-103(4)).

31 "Pollution Control Project" means any activity or project at  
32 an existing electric utility steam generating unit for purposes of  
33 reducing emissions from such unit. Such activities or projects are  
34 limited to:

35 (1) The installation of conventional or innovative pollution  
36 control technology, including but not limited to advanced flue gas  
37 desulfurization, sorbent injection for sulfur dioxide and nitrogen  
38 oxides controls and electrostatic precipitators;

39 (2) An activity or project to accommodate switching to a fuel  
40 which is less polluting than the fuel used prior to the activity or  
41 project, including, but not limited to natural gas or coal  
42 reburning, or the cofiring of natural gas and other fuels for the  
43 purpose of controlling emissions;

44 (3) A permanent clean coal technology demonstration project  
45 conducted under Title II, sec. 101(d) of the Further Continuing

1 Appropriations Act of 1985 (sec. 5903(d) of title 42 of the United  
2 States Code), or subsequent appropriations, up to a total amount of  
3 \$2,500,000,000 for commercial demonstration of clean coal  
4 technology, or similar projects funded through appropriations for  
5 the Environmental Protection Agency; or

6 (4) A permanent clean coal technology demonstration project  
7 that constitutes a repowering project.

8 "Potential to Emit" means the maximum capacity of a source to  
9 emit a pollutant under its physical and operational design. Any  
10 physical or operational limitation on the capacity of the source to  
11 emit a pollutant including air pollution control equipment and  
12 restrictions on hours of operation or on the type or amount of  
13 material combusted, stored, or processed shall be treated as part  
14 of its design if the limitation or the effect it would have on  
15 emissions is enforceable. Secondary emissions do not count in  
16 determining the potential to emit of a stationary source.

17 "Primary PM2.5" means the sum of filterable PM2.5 and  
18 condensable PM2.5.

19 "Process Level" means the operation of a source, specific to  
20 the kind or type of fuel, input material, or mode of operation.

21 "Process Rate" means the quantity per unit of time of any raw  
22 material or process intermediate consumed, or product generated,  
23 through the use of any equipment, source operation, or control  
24 apparatus. For a stationary internal combustion unit or any other  
25 fuel burning equipment, this term may be expressed as the quantity  
26 of fuel burned per unit of time.

27 "Reactivation of a Very Clean Coal-Fired Electric Utility Steam  
28 Generating Unit" means any physical change or change in the method  
29 of operation associated with the commencement of commercial  
30 operations by a coal-fired utility unit after a period of  
31 discontinued operation where the unit:

32 (1) Has not been in operation for the two-year period prior  
33 to the enactment of the Clean Air Act Amendments of 1990, and the  
34 emissions from such unit continue to be carried in the emission  
35 inventory at the time of enactment;

36 (2) Was equipped prior to shutdown with a continuous system  
37 of emissions control that achieves a removal efficiency for sulfur  
38 dioxide of no less than 85 percent and a removal efficiency for  
39 particulates of no less than 98 percent;

40 (3) Is equipped with low-NOx burners prior to the time of  
41 commencement of operations following reactivation; and

42 (4) Is otherwise in compliance with the requirements of the  
43 Clean Air Act.

44 "Reasonable Further Progress" means annual incremental  
45 reductions in emission of an air pollutant which are sufficient to

1 provide for attainment of the NAAQS by the date identified in the  
2 State Implementation Plan.

3 "Refuse" means solid wastes, such as garbage and trash.

4 "Regulated air pollutant" means any of the following:

5 (a) Nitrogen oxides or any volatile organic compound;

6 (b) Any pollutant for which a national ambient air quality  
7 standard has been promulgated;

8 (c) Any pollutant that is subject to any standard promulgated  
9 under Section 111 of the Act, Standards of Performance for New  
10 Stationary Sources;

11 (d) Any Class I or II substance subject to a standard  
12 promulgated under or established by Title VI of the Act,  
13 Stratospheric Ozone Protection;

14 (e) Any pollutant subject to a standard promulgated under  
15 Section 112, Hazardous Air Pollutants, or other requirements  
16 established under Section 112 of the Act, including Sections 112(g),  
17 (j), and (r) of the Act, including any of the following:

18 (i) Any pollutant subject to requirements under Section 112(j)  
19 of the Act, Equivalent Emission Limitation by Permit. If the  
20 Administrator fails to promulgate a standard by the date established  
21 pursuant to Section 112(e) of the Act, any pollutant for which a  
22 subject source would be major shall be considered to be regulated  
23 on the date 18 months after the applicable date established pursuant  
24 to Section 112(e) of the Act;

25 (ii) Any pollutant for which the requirements of Section  
26 112(g)(2) of the Act (Construction, Reconstruction and Modification)  
27 have been met, but only with respect to the individual source subject  
28 to Section 112(g)(2) requirement.

29 "Repowering" means replacement of an existing coal-fired boiler  
30 with one of the following clean coal technologies: atmospheric or  
31 pressurized fluidized bed combustion, integrated gasification  
32 combined cycle, magnetohydrodynamics, direct and indirect coal-  
33 fired turbines, integrated gasification fuel cells, or as determined  
34 by the Administrator, in consultation with the Secretary of Energy,  
35 a derivative of one or more of these technologies, and any other  
36 technology capable of controlling multiple combustion emissions  
37 simultaneously with improved boiler or generation efficiency and  
38 with significantly greater waste reduction relative to the  
39 performance of technology in widespread commercial use as of  
40 November 15, 1990.

41 (1) Repowering shall also include any oil and/or gas-fired  
42 unit which has been awarded clean coal technology demonstration  
43 funding as of January 1, 1991, by the Department of Energy.

44 (2) The director shall give expedited consideration to permit  
45 applications for any source that satisfies the requirements of this

1 definition and is granted an extension under section 409 of the  
2 Clean Air Act.

3 "Representative Actual Annual Emissions" means the average  
4 rate, in tons per year, at which the source is projected to emit a  
5 pollutant for the two-year period after a physical change or change  
6 in the method of operation of unit, (or a different consecutive two-  
7 year period within 10 years after that change, where the director  
8 determines that such period is more representative of source  
9 operations), considering the effect any such change will have on  
10 increasing or decreasing the hourly emissions rate and on projected  
11 capacity utilization. In projecting future emissions the director  
12 shall:

13 (1) Consider all relevant information, including but not  
14 limited to, historical operational data, the company's own  
15 representations, filings with the State of Federal regulatory  
16 authorities, and compliance plans under title IV of the Clean Air  
17 Act; and

18 (2) Exclude, in calculating any increase in emissions that  
19 results from the particular physical change or change in the method  
20 of operation at an electric utility steam generating unit, that  
21 portion of the unit's emissions following the change that could have  
22 been accommodated during the representative baseline period and is  
23 attributable to an increase in projected capacity utilization at  
24 the unit that is unrelated to the particular change, including any  
25 increased utilization due to the rate of electricity demand growth  
26 for the utility system as a whole.

27 "Residence" means a dwelling in which people live, including  
28 all ancillary buildings.

29 "Residential Solid Fuel Burning" device means any residential  
30 burning device except a fireplace connected to a chimney that burns  
31 solid fuel and is capable of, and intended for use as a space heater,  
32 domestic water heater, or indoor cooking appliance, and has an air-  
33 to-fuel ratio less than 35-to-1 as determined by the test procedures  
34 prescribed in 40 CFR 60.534. It must also have a useable firebox  
35 volume of less than 6.10 cubic meters or 20 cubic feet, a minimum  
36 burn rate less than 5 kilograms per hour or 11 pounds per hour as  
37 determined by test procedures prescribed in 40 CFR 60.534, and weigh  
38 less than 800 kilograms or 362.9 pounds. Appliances that are  
39 described as prefabricated fireplaces and are designed to  
40 accommodate doors or other accessories that would create the air  
41 starved operating conditions of a residential solid fuel burning  
42 device shall be considered as such. Fireplaces are not included in  
43 this definition for solid fuel burning devices.

44 "Road" means any public or private road.

45 "Salvage Operation" means any business, trade or industry

1 engaged in whole or in part in salvaging or reclaiming any product  
2 or material, including but not limited to metals, chemicals,  
3 shipping containers or drums.

4 "Secondary Emissions" means emissions which would occur as a  
5 result of the construction or operation of a major source or major  
6 modification, but do not come from the major source or major  
7 modification itself.

8 Secondary emissions must be specific, well defined,  
9 quantifiable, and impact the same general area as the source or  
10 modification which causes the secondary emissions. Secondary  
11 emissions include emissions from any off-site support facility which  
12 would not be constructed or increase its emissions except as a  
13 result of the construction or operation of the major source or major  
14 modification. Secondary emissions do not include any emissions  
15 which come directly from a mobile source such as emissions from the  
16 tailpipe of a motor vehicle, from a train, or from a vessel.

17 Fugitive emissions and fugitive dust from the source or  
18 modification are not considered secondary emissions.

19 "Secondary PM2.5" means particles that form or grow in mass  
20 through chemical reactions in the ambient air well after dilution  
21 and condensation have occurred. Secondary PM2.5 is usually formed  
22 at some distance downwind from the source.

23 "Significant" means:

24 (1) In reference to a net emissions increase or the potential  
25 of a source to emit any of the following pollutants, a rate of  
26 emissions that would equal or exceed any of the following rates:

27 Carbon monoxide: 100 ton per year (tpy);

28 Nitrogen oxides: 40 tpy;

29 Sulfur dioxide: 40 tpy;

30 PM10: 15 tpy;

31 PM2.5: 10 tpy;

32 Particulate matter: 25 tpy;

33 Ozone: 40 tpy of volatile organic compounds;

34 Lead: 0.6 tpy.

35 "Solid Fuel" means wood, coal, and other similar organic  
36 material or combination of these materials.

37 "Solvent" means organic materials which are liquid at standard  
38 conditions (Standard Temperature and Pressure) and which are used  
39 as solvers, viscosity reducers, or cleaning agents.

40 "Source" means any structure, building, facility, or  
41 installation which emits or may emit any air pollutant subject to  
42 regulation under the Clean Air Act and which is located on one or  
43 more continuous or adjacent properties and which is under the  
44 control of the same person or persons under common control. A  
45 building, structure, facility, or installation means all of the



1 pollutant-emitting activities which belong to the same industrial  
2 grouping. Pollutant-emitting activities shall be considered as part  
3 of the same industrial grouping if they belong to the same "Major  
4 Group" (i.e. which have the same two-digit code) as described in  
5 the Standard Industrial Classification Manual, 1972, as amended by  
6 the 1977 Supplement (US Government Printing Office stock numbers  
7 4101-0065 and 003-005-00176-0, respectively).

8 "Stack" means any point in a source designed to emit solids,  
9 liquids, or gases into the air, including a pipe or duct but not  
10 including flares.

11 "Standards of Performance for New Stationary Sources" means  
12 the Federally established requirements for performance and record  
13 keeping (Title 40 Code of Federal Regulations, Part 60).

14 "State" means Utah State.

15 "Temporary" means not more than 180 calendar days.

16 "Temporary Clean Coal Technology Demonstration Project" means  
17 a clean coal technology demonstration project that is operated for  
18 a period of 5 years or less, and which complies with the Utah State  
19 Implementation Plan and other requirements necessary to attain and  
20 maintain the national ambient air quality standards during the  
21 project and after it is terminated.

22 "Threshold Limit Value - Ceiling (TLV-C)" means the airborne  
23 concentration of a substance which may not be exceeded, as adopted  
24 by the American Conference of Governmental Industrial Hygienists in  
25 its "Threshold Limit Values for Chemical Substances and Physical  
26 Agents and Biological Exposure Indices, (2009)."

27 "Threshold Limit Value - Time Weighted Average (TLV-TWA)" means  
28 the time-weighted airborne concentration of a substance adopted by  
29 the American Conference of Governmental Industrial Hygienists in  
30 its "Threshold Limit Values for Chemical Substances and Physical  
31 Agents and Biological Exposure Indices, (2009)."

32 "Total Suspended Particulate (TSP)" means minute separate  
33 particles of matter, collected by high volume sampler.

34 "Toxic Screening Level" means an ambient concentration of an  
35 air pollutant equal to a threshold limit value - ceiling (TLV- C)  
36 or threshold limit value -time weighted average (TLV-TWA) divided  
37 by a safety factor.

38 "Trash" means solids not considered to be highly flammable or  
39 explosive including, but not limited to clothing, rags, leather,  
40 plastic, rubber, floor coverings, excelsior, tree leaves, yard  
41 trimmings and other similar materials.

42 "VOC content" means the weight of VOC per volume of material  
43 and is calculated by the following equation in gram/liter (or  
44 alternately in pound/gallon, or pound/pound):

45 Grams of VOC per Liter of Material =  $W_s - W_w - W_{es} / V_m$

1       Where:

2       Ws = weight of volatile organic compounds

3       Ww = weight of water

4       Wes = weight of exempt compounds

5       Vm = volume of material

6       "Volatile Organic Compound (VOC)" means VOC as defined in 40  
7 CFR 51.100(s), effective as of the date referenced in R307-101-3,  
8 is hereby adopted and incorporated by reference.

9       "Waste" means all solid, liquid or gaseous material, including,  
10 but not limited to, garbage, trash, household refuse, construction  
11 or demolition debris, or other refuse including that resulting from  
12 the prosecution of any business, trade or industry.

13       "Zero Drift" means the change in the instrument meter readout  
14 over a stated period of time of normal continuous operation when  
15 the VOC concentration at the time of measurement is zero.

16

17 **KEY: air pollution, definitions**

18 **Date of Enactment or Last Substantive Amendment: February 7, 2019**

19 **Notice of Continuation: November 13, 2018**

20 **Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)**

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